

What is claimed is:

1. (Original) A catheter device comprising an elongated body member having a distal portion and a deflection mechanism operably coupled to the distal portion so as to cause the distal portion to deflect with respect to a longitudinal axis of the elongated body member, wherein the catheter device further includes:

5 a guide member;

a guiding mechanism coupled to the elongated body member and configured so as to guide the guide member; and

wherein the guiding mechanism includes an exit portion from which the guide member exits when the guide member is being deployed from the guiding
10 mechanism, where the exit portion is disposed with respect to the distal portion so the distal portion deflects from and with respect to the guide member, when the guide member is in deployed condition.

2. (Original) The catheter device of claim 1, wherein the exit portion is
15 located with respect to a deflection point of the distal portion.

3. (Original) The catheter device of claim 1, wherein the exit portion is located in proximity to a deflection point of the distal portion.

20 4. (Original) The catheter device of claim 1, wherein the exit portion is located at about a deflection point of the distal portion.

5. (Original) The catheter device of claim 1, wherein the exit portion is located with a range of values on either side of a deflection point of the distal portion.
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6. (Original) The catheter device of claim 1, wherein the guiding mechanism comprises a channel within the elongated body member and the exit portion comprises a through aperture in a side of the elongated body member that is in
30 communication with the channel, whereby the guide member is deployed from the through aperture.

7. (Original) The catheter device of claim 1, wherein the guiding mechanism comprises a body portion including a channel that is secured to and extending axially along the elongated body member, wherein the guide member is moveably disposed within the body portion channel.

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8. (Original) The catheter device of claim 7, wherein the body portion is configured and arranged so as to end in proximity to the deflection point of the distal portion and wherein the exit portion comprises a through aperture in an end of the body portion in communication with the lumen.

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9. (Original) The catheter device of claim 1, wherein the guiding mechanism comprises an artifact on the external surface of the elongated body member and extending axially along the elongated body member, where the artifact and the guide member are configured and arranged so the guide member is moveably retained by the artifact and so as to allow for deployment of the guide member.

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10. (Original) The catheter device of claim 9, wherein the artifact is a rail member and the rail member and the guide member are configured and arranged so the guide member is moveable retained by the rail.

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11. (Original) The catheter device of claim 1, wherein the guide member is a guide wire.

12. (Original) The catheter device of claim 1, further comprising an ablation device being disposed in the distal portion, the ablation device being configured and arranged to ablate tissues proximal the ablation device.

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13. (Original) The catheter device of claim 1, wherein the ablation device is configured and arranged so ablation is caused by one of RF energy, thermal energy, cryothermal energy, ultrasound or laser light techniques.

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14. (Original) The catheter device of claim 1, wherein the exit portion is configured and arranged so that the distal portion when in a deflected condition is

rotatable about the guide member, when the guide member is in a deployed condition.

15. (Original) A catheter device comprising an elongated body member
5 having a distal portion and a deflection mechanism operably coupled to the distal
portion so as to cause the distal portion to deflect with respect to a longitudinal axis
of the elongated body member, wherein the catheter device further includes:
a guide member;
a guiding mechanism coupled to the elongated body member and configured
10 so as to guide the guide member;
an ablation device being disposed in the distal portion, the ablation device
being configured and arranged to ablate tissues proximal the ablation device;
wherein the guiding mechanism includes an exit portion from which the guide
member exits when the guide member is being deployed from the guiding
15 mechanism;
wherein the exit portion is disposed with respect to the distal portion so the
distal portion deflects from and with respect to the guide member, when the guide
member is in deployed condition;
wherein the exit portion is configured and arranged so that the distal portion
20 when in a deflected condition is rotatable about the guide member, when the guide
member is in a deployed condition;

16. (Original) The catheter device of claim 15, wherein the exit portion is
located with respect to a deflection point of the distal portion.

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17. (Original) The catheter device of claim 15, wherein the exit portion is
located in proximity to a deflection point of the distal portion.

18. (Original) The catheter device of claim 15, wherein the exit portion is
30 located at about a deflection point of the distal portion.

19. (Original) The catheter device of claim 15 wherein the exit portion is located with a range of values on either side of a deflection point of the distal portion.

5 20. (Original) The catheter device of claim 15, wherein the guiding mechanism comprises a channel within the elongated body member and the exit portion comprises a through aperture in a side of the elongated body member that is in communication with the channel, whereby the guide member is deployed from the through aperture.

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21. (Original) The catheter device of claim 15, wherein the guiding mechanism comprises a body portion including a channel that is secured to and extending axially along the elongated body member, wherein the guide member is moveably disposed within the body portion channel.

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22. (Original) The catheter device of claim 21, wherein the body portion is configured and arranged so as to end in proximity to the deflection point of the distal portion and wherein the exit portion comprises a through aperture in an end of the body portion in communication with the channel.

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23. (Original) The catheter device of claim 15, wherein the guiding mechanism comprises an artifact on the external surface of the elongated body member and extending axially along the elongated body member, where the artifact and the guide member are configured and arranged so the guide member is moveably retained by the artifact so as to allow for deployment of the guide member.

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24. (Original) The catheter device of claim 15, wherein the ablation device is configured and arranged so ablation is caused by one of RF energy, thermal energy, cryothermal energy, ultrasound or laser light techniques.

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25. (Original) The catheter device of claim 15, wherein the guide member is a guide wire.

26. (Original) A method for ablating tissue in particular atrial tissue, comprising the steps of:

providing a deflection catheter device that includes a deflectable distal portion, an ablation device disposed within the deflectable distal portion and a guide member;

deploying the guide member so at least a distal portion thereof is deployed through an opening in, and disposed in, a chamber, vessel or vein of a body; deflecting the deflectable distal portion with respect to the guide member.

27. (Original) The tissue ablating method of claim 26, further comprising the step(s) of:

contacting a tissue area including tissues to be ablated with at least a part of the deflectable portion, where the ablation device is disposed within the part; and actuating the ablation device.

28. (Original) The tissue ablating method of claim 27, further comprising the step(s) of:

rotating the deflectable distal portion about the guide member; and wherein said contacting includes contacting another tissue area.

29. (Original) The tissue ablating method of claim 28, further comprising the step(s) of:

de-activating the ablation device during said rotating; and activating the ablation device after contacting said another tissue area.

30. (Original) The tissue ablating method of claim 28, further comprising the step(s) of:

maintaining the ablation device in an activated condition as the deflectable distal portion is being rotated about the guide member.

31. (Original) The tissue ablating method of claims 28-30, further comprising the step(s) of:

re-configuring the deflectable distal portion during said rotating so as to maintain the at least a part of the distal portion in contact with the tissues.

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32. (Original) The tissue ablating method of claims 26-31, wherein:

the provided deflectable catheter device further includes a guiding mechanism that moveably retains at least a portion of the guide member; and

10 said deploying includes deploying the guide member from the guiding mechanism.

33. (Original) The tissue ablating method of claim 32, wherein:

the guiding mechanism includes an exit part from which the guide member exits as it is being deployed; and

15 the exit portion is located in predetermined relation with respect to an end of the deflectable distal portion.

34. (Original) The tissue ablating method of claims 32, wherein the exit part

20 and the guiding mechanism are configured and arranged so that the deflectable distal portion can be rotated about the guide member.

35. (Original) The tissue ablating method of claims 26-34, wherein the guide member is a guide wire.

25 36. (Original) The tissue ablating method of claims 27-35, wherein the ablating device is configured and arranged so ablation is caused by one of RF energy, thermal energy, cryothermal energy, ultrasound or laser light techniques.

30 37. (Original) A method for ablating tissue in particular atrial tissue, comprising the steps of:

providing a deflection catheter device that includes a deflectable distal portion, an ablation device disposed within the deflectable distal portion, a guide

member and a guiding mechanism that moveably retains at least a portion of the guide member;

localizing an end of the deflectable distal portion with respect an opening in a chamber, vessel or vein of a mammalian body;

5 deploying the guide member from the guiding mechanism so at least a distal portion thereof is deployed through the opening in, and is disposed in, the chamber, vessel or vein of the mammalian body;

deflecting the deflectable distal portion with respect to the guide member;

10 contacting a tissue area including tissues to be ablated with at least a part of the deflectable portion, where the ablation device is disposed within the part; and actuating the ablation device.

38. (Original) The tissue ablating method of claim 37, further comprising the step(s) of:

15 rotating the deflectable distal portion about the guide member; and wherein said contacting includes contacting another tissue area.

39. (Original) The tissue ablating method of claim 38, further comprising the step(s) of:

20 de-activating the ablation device during said rotating; and activating the ablation device after contacting said another tissue area.

40. (Original) The tissue ablating method of claim 38, further comprising the step(s) of:

25 maintaining the ablation device in an activated condition as the deflectable distal portion is being rotated about the guide member.

41. (Original) The tissue ablating method of claims 38-40, further comprising the step(s) of:

30 re-configuring the deflectable distal portion during said rotating so as to maintain the at least a part of the distal portion in contact with the tissues.

42. (Original) The tissue ablating method of claim 32, wherein:
the guiding mechanism includes an exit part from which the guide member
exits as it is being deployed; and
the exit portion is located in predetermined relation with respect to an end of
5 the deflectable distal portion.

43. (Original) The tissue ablating method of claim 42, wherein the exit part
and the guiding mechanism are configured and arranged so that the deflectable distal
portion can be rotated about the guide member.

44. (Original) The tissue ablating method of claims 37-43, wherein the guide
member is a guide wire.

45. (Original) The tissue ablating method of claims 37-44, wherein the
15 ablating device is configured and arranged so ablation is caused by one of RF energy,
thermal energy, cryothermal energy, ultrasound or laser light techniques.

46. (Original) A method for treating arrhythmias, comprising the steps of:
providing a deflection catheter device that includes a deflectable distal
20 portion, an ablation device disposed within the deflectable distal portion and a guide
member;

deploying the guide member so at least a distal portion thereof is deployed
through an opening in, and disposed in, a vein of a mammalian body;
deflecting the deflectable distal portion with respect to the guide member.

47. (Original) The method of claim 46, further comprising the step(s) of:
contacting a tissue area including tissues to be ablated with at least a part of
the deflectable portion, where the ablation device is disposed within the part; and
actuating the ablation device.

48. (Original) The tissue of claim 47, further comprising the step(s) of:
rotating the deflectable distal portion about the guide member; and
wherein said contacting includes contacting another tissue area.

49. (Original) The method of claim 48, further comprising the step(s) of:
de-activating the ablation device during said rotating; and
activating the ablation device after contacting said another tissue area.

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50. (Original) The method of claim 48, further comprising the step(s) of:
maintaining the ablation device in an activated condition as the deflectable
distal portion is being rotated about the guide member.

10 51. (Original) The method of claims 48-50, further comprising the step(s) of:
re-configuring the deflectable distal portion during said rotating so as to
maintain the at least a part of the distal portion in contact with the tissues.

15 52. (Original) The method of claims 46-51, wherein:
the provided deflectable catheter device further includes a guiding mechanism
that moveably retains at least a portion of the guide member; and
said deploying includes deploying the guide member from the guiding
mechanism.

20 53. (Original) The method of claim 52, wherein:
the guiding mechanism includes an exit part from which the guide member
exits as it is being deployed; and
the exit portion is located in predetermined relation with respect to an end of
the deflectable distal portion.

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54. (Original) The method of claims 52, wherein the exit part and the guiding
mechanism are configured and arranged so that the deflectable distal portion can be
rotated about the guide member.

30 55. (Original) The method of claims 46-54, wherein the guide member is a
guide wire.

56. (Original) The method of claims 47-55, wherein the ablating device is configured and arranged so ablation is caused by one of RF energy, thermal energy, cryothermal energy, ultrasound or laser light techniques.

- 5 57. (Original) A method for treating arrhythmias, comprising the steps of:
providing a deflection catheter device that includes a deflectable distal
portion, an ablation device disposed within the deflectable distal portion, a guide
member and a guiding mechanism that moveably retains at least a portion of the
guide member;
10 localizing an end of the deflectable distal portion within the left atrium of a
mammalian body and with respect to an opening in a vein;
deploying the guide member from the guiding mechanism so at least a distal
portion thereof is deployed through the opening in, and is disposed in, the vein;
deflecting the deflectable distal portion with respect to the guide member;
15 contacting a tissue area including tissues to be ablated with at least a part of
the deflectable portion, where the ablation device is disposed within the part; and
actuating the ablation device.

- 20 58. (Original) The method of claim 57, further comprising the step(s) of:
rotating the deflectable distal portion about the guide member; and
wherein said contacting includes contacting another tissue area.

- 25 59. (Original) The method of claim 58, further comprising the step(s) of:
de-activating the ablation device during said rotating; and
activating the ablation device after contacting said another tissue area.

- 30 60. (Original) The method of claim 58, further comprising the step(s) of:
maintaining the ablation device in an activated condition as the deflectable
distal portion is being rotated about the guide member.

61. (Original) The method of claims 58-60, further comprising the step(s) of:
re-configuring the deflectable distal portion during said rotating so as to
maintain the at least a part of the distal portion in contact with the tissues.

62. (Original) The method of claims 57-61, wherein the exit part and the guiding mechanism are configured and arranged so that the deflectable distal portion can be rotated about the guide member.

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63. (Original) The method of claims 57-62, wherein the guide member is a guide wire.

64. (Original) The method of claims 57-63, wherein the ablating device is configured and arranged so ablation is caused by one of RF energy, thermal energy, cryothermal energy, ultrasound or laser light techniques.

65. (Original) A method for treating left atrial arrhythmia in a left atrium of a mammalian body; comprising the steps of:

15 providing a deflection catheter device that includes a deflectable distal portion, an ablation device disposed within the deflectable distal portion, a guide member and a guiding mechanism that moveably retains at least a portion of the guide member;

20 introducing a portion of the catheter device including the deflectable distal portion into the left atrium;

positioning an end of the deflectable distal portion with respect to an a pulmonary vein extending from the left atrium;

25 deploying the guide member from the guiding mechanism so at least a distal portion thereof is deployed through the opening in, and is disposed in, the pulmonary vein;

deflecting the deflectable distal portion with respect to the guide member;

contacting a tissue area including tissues to be ablated with at least a part of the deflectable portion, where the ablation device is disposed within the part; and actuating the ablation device.

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66. (Original) The method of claim 65, further comprising the step(s) of: rotating the deflectable distal portion about the guide member; and wherein said contacting includes contacting another tissue area.

67. (Original) The method of claim 66, further comprising the step(s) of:
de-activating the ablation device during said rotating; and
activating the ablation device after contacting said another tissue area.

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68. (Original) The method of claim 66, further comprising the step(s) of:
maintaining the ablation device in an activated condition as the deflectable
distal portion is being rotated about the guide member.

10 69. (Original) The method of claims 66-68, further comprising the step(s) of:
re-configuring the deflectable distal portion during said rotating so as to
maintain the at least a part of the distal portion in contact with the tissues.

15 70. (Original) The method of claims 65-69, wherein the exit part and the
guiding mechanism are configured and arranged so that the deflectable distal portion
can be rotated about the guide member.

20 71. (Original) The method of claims 65-70, wherein the guide member is a
guide wire.

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72. (Original) The method of claims 65-71, wherein the ablating device is
configured and arranged so ablation is caused by one of RF energy, thermal energy,
cryothermal energy, ultrasound or laser light techniques.

25 73. (Original) The method of claims 37-72, further comprising the steps of:
monitoring electrical conduction signals along a pulmonary vein;
identifying an origin of atrial arrhythmias as being located in the pulmonary
vein based upon the monitored conduction signals.

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